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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,782	08/31/2001	Masahiro Kageyama	500.40610X00	9751-
20457	7590	11/16/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			LY, ANH	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,782

Applicant(s)

KAGEYAMA ET AL.

Examiner

Anh Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) *
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is response to Applicants' amendment filed 07/16/2004.
2. Claims 28-29 are added.
3. Claims 1-29 are pending in this application.

Priority

4. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

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directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-4, 6, 8, 9-12, 14, 16, 17-20, 22, 24 and 25-27 are rejected under 35 U.S.C. 102(e) as being Anticipated by US Patent No. 6,665,690 issued to Kimura et al. (hereinafter Kimura).

With respect to claim 1, Kimura teaches reading a file type information associated with a file to be processed from the recording medium (two file types such as AV data and PC data and both of them are stored on a disc type medium: see abstract; PC data can be read by a computer via an interface: see fig. 19 and col. 34, lines 63-67 and col. 2, lines 10-22; also col. 1, lines 51-58);

converting said file type information indicative of said first processing mode to a file type information indicative of said second processing mode (converting PC data into another data, which can be read by the drive unit: col. 35, lines 1-7)

writing the converted file type information in the recording medium as the file management information associated with said file to be processed (AV data is another file type after conversion to be written: col. 33, lines 40-67 and col. 34, lines 1-10).

With respect to claim 2, Kimura teaches judging whether or not in all the N sectors of said ECC blocks that store data belonging to the file, are occupied (a number of physical sectors of a disc type recording medium: col. 3, lines 65-67 and col. 4, lines 1-3); and

and when judging that the data is not stored in the all N sectors of the ECC blocks, registering in said file management information remaining sector in which the data of the file to be processed is not stored as a stuffing (number of sectors including usable and unusable sectors: col. 12, lines 15-30 and col. 35, lines 22-46 for Error correction block from the processing of AV file).

With respect to claim 3, Kimura teaches judging whether or not data, termed as other data, belonging to a file, termed as another file, other than said file to be processed is stored in said remaining sector (col. 12, lines 15-30);

when judging that the other data is stored in the remaining sector, moving said other data to another ECC block other than said ECC block; and reflecting a result of said movement in file management information for management of said other file (col. 37, lines 38-67 and col. 38, lines 1-14).

With respect to claim 4, Kimura teaches judging whether or not data belonging to a file other than said file to be processed is stored in said remaining sector (col. 12, lines 15-30);

when judging that the other data is stored in said remaining sector, moving said other data to said another ECC block (col. 35, lines 22-46); and

and reflecting a result of said movement in the file management information (col. 37, lines 38-67).

With respect to claim 6, Kimura teaches setting a flag for inhibiting relocation of the file to be processed (using a field or flag in a detective sector: col. 32, lines 60-67).

With respect to claim 8, Kimura teaches judging without using said file type

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information whether or not said file to be processed is read in said second processing mode (col. 7, lines 26-38 and col. 21, lines 48-61);

when judging by said judgment step that said file to be processed. is read, reading the data in said second processing mode (col. 33, lines 1-13);

and when judging by said judgment step that said file to be processed. is not read, reading the data in said first processing mode (col. 28, lines 48-60 and col. 36, lines 35-50).

Claim 9 is essentially the same as claim 1 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 10 is essentially the same as claim 2 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 11 is essentially the same as claim 3 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 12 is essentially the same as claim 4 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 14 is essentially the same as claim 6 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 16 is essentially the same as claim 8 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 8 hereinabove.

Claim 17 is essentially the same as claim 1 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 18 is essentially the same as claim 2 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 19 is essentially the same as claim 3 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 20 is essentially the same as claim 4 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 22 is essentially the same as claim 6 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 24 is essentially the same as claim 8 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 8 hereinabove.

With respect to claim 25, Kimura discloses regarding the file type of a file to be

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processed as said Second processing mode regardless of said file type and reading the data in said second processing mode (two file types such as AV data and PC data and both of them are stored on a disc type medium: see abstract and fig. 19, reading the second mode or file such as AV data: col. 33, lines 62-67 and col. 34, lines 1-18).

Claim 26 is essentially the same as claim 25 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 25 hereinabove.

Claim 27 is essentially the same as claim 25 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 25 hereinabove.

With respect to claim 28, Kimura teaches recording information on a file type of the data in the recording medium, the file type in the data being both of a first file type associated with a first processing mode in which a data reading operation stops in response to an error in the data and a second file type associated with a second processing mode in which a data reading operation is kept continued regardless of an error in the data; reading the information on the file type of the data to be processed from the recording medium, converting the first file type of the data read from the recording medium to the second file type in response to existence of a part of the first file type, writing the converted second file type into the recording medium, and reading out the data, a file type of which is the second file type, from the recording medium (AV data and PC data and both of them are stored on a disc type medium: see abstract; PC data can be read by a computer via an interface: see fig. 19 and col. 34,

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lines 63-67 and col. 2, lines 10-22; also col. 1, lines 51-58; converting PC data into another data, which can be read by the drive unit: col. 35, lines 1-7; AV data is another file type after conversion to be written: col. 33, lines 40-67 and col. 34, lines 1-10).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 5, 7, 13, 15, 21, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,665,690 issued to Kimura et al. (hereinafter Kimura) in view of US Patent No. 6,014,755 issued to Wells et al. (hereinafter Wells).

With respect to claim 5, Kimura discloses a file management method as discussed in claim 1.

Kimura discloses a file management method for a recording and/or reproduction apparatus for recording and /or reproducing AV data onto and /or from a disc type recording medium and two pressing recording steps for recording management information for the file (col. 1, lines 42-50), and also two file type are processed such as PC data and AV data (see abstract), a plurality of allocation extents having variable length, a plurality of blocks and a number of physical sectors (col. 3, lines 65-67 and col. 4, lines 1-3, and see fig. 1). Also Kimura teaches registering a plurality of allocation (col. 21, lines 48-61). Kimura does not explicitly indicate deleting first data allocation information indicative of a data storage location on the recording medium prior to said movement in said file management information.

However, Wells teaches removing blocks of sectors in the recording medium (col. 3, lines 1-12, col. 9, lines 14-21 and see abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Kimura with the teachings of Wells by incorporating the use of deleting blocks of sectors of recording medium such as hard disk. The motivation being to provide replacement process to defect in the recording or reproducing information onto or from a disk and more particularly to a file

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system to be used for recording in which a disc type recording medium is used and the file management unit discriminates whether or not the amount of data to be recorded into a particular block.

With respect to claim 7, Kimura teaches reading data stored at another write area and writing said data in an original recording area where the data would have been written without said replacement processing and the reading step and writing step are carried out on a basis of an ECC block including N recording units (N: positive integer) termed as sectors (the contents of sectors are read and written in units of a logical sector: col. 7, lines 26-38 and col. 35, lines 1-35; a number of physical sectors of a disc type recording medium: col. 3, lines 65-67 and col. 4, lines 1-3).

Kimura discloses a file management method for a recording and/or reproduction apparatus for recording and /or reproducing AV data onto and /or from a disc type recording medium and two pressing recording steps for recording management information for the file (col. 1, lines 42-50), and also two file type are processed such as PC data and AV data (see abstract), a plurality of allocation extents having variable length, a plurality of blocks and a number of physical sectors (col. 3, lines 65-67 and col. 4, lines 1-3, and see fig. 1). Also Kimura teaches registering a plurality of allocation (col. 21, lines 48-61) and replacing processing in a drive (col. 32, lines 38-47). Kimura does not clearly teach another write area by said replacement processing.

However, Wells teaches replacing the valid data by rewriting or rereading each sector (col. 5, lines 5-14, col. 6, lines 58-67 and col. 7, lines 1-38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Kimura with the teachings of Wells by incorporating the use of replacement processing by rewriting/rereading the data in the sectors. The motivation being to provide replacement process to defect in the recording or reproducing information onto or from a disk and more particularly to a file system to be used for recording in which a disc type recording medium is used and the file management unit discriminates whether or not the amount of data to be recorded into a particular block.

Claim 13 is essentially the same as claim 5 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 15 is essentially the same as claim 7 except that it is directed to an apparatus rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

Claim 21 is essentially the same as claim 5 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 23 is essentially the same as claim 7 except that it is directed to a program rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claim 29, Kimura teaches a method as discussed in claim 28.

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Kimura discloses a file management method for a recording and/or reproduction apparatus for recording and /or reproducing AV data onto and /or from a disc type recording medium and two pressing recording steps for recording management information for the file (col. 1, lines 42-50), and also two file type are processed such as PC data and AV data (see abstract), a plurality of allocation extents having variable length, a plurality of blocks and a number of physical sectors (col. 3, lines 65-67 and col. 4, lines 1-3, and see fig. 1). N-recording units termed as sectors and ECC blocks (a number of physical sectors of a disc type recording medium: col. 3, lines 65-67 and col. 4, lines 1-3 and number of sectors including usable and unusable sectors: col. 12, lines 15-30 and col. 35, lines 22-46 for Error correction block from the processing of AV file). Also Kimura teaches registering a plurality of allocation (col. 21, lines 48-61) and replacing processing in a drive (col. 32, lines 38-47). Kimura does not clearly teach another write area by said replacement processing.

However, Wells teaches replacing the valid data by rewriting or rereading each sector (col. 5, lines 5-14, col. 6, lines 58-67 and col. 7, lines 1-38).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Kimura with the teachings of Wells by incorporating the use of replacement processing by rewriting/rereading the data in the sectors. The motivation being to provide replacement process to defect in the recording or reproducing information onto or from a disk and more particularly to a file system to be used for recording in which a disc type recording medium is used and

the file management unit discriminates whether or not the amount of data to be recorded into a particular block.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM.

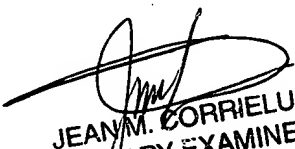
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or Primary Examiner Jean Corrielus (571) 272-4032.


Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: Central Fax Center (703) 872-9306


JEAN M. CORRIELUS
PRIMARY EXAMINER

ANH LY 
NOV. 10th, 2004